ARTICLE 16

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# A NEW SUBSPECIES OF *DROMICUS ANDREAE* (SERPENTES, COLUBRIDAE)

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Early in 1966 on a trip to the Archipiélago de los Canarreos, autimentally of cays off the south coast of Cuba, the junior author collected two specimens of *Dromicus andreae* Bibrón very different in coloration from the other recognized subspecies on Cuba and the Isla de Pinos. These snakes represent a distinct subspecies. The latest discussion of *Dromicus andreae* is that of Schwartz and Thomas (1960) which was based largely on recent collections. Most of the specimens cited below ("specimens examined") are those examined by Schwartz and Thomas but not listed in that paper.

For the loan of specimens required for the present paper, we wish to thank Neil D. Richmond and Clarence J. McCoy of Carnegie Museum (CM), and Ernest E. Williams of the Museum of Comparative Zoology (MCZ). Other abbreviations used herein are: AMNH (American Museum of Natural History), ASFS (Albert Schwartz Field Series), IB (Instituto de Biología, Academia de Ciencias de Cuba), INHS (Illinois Natural History Survey), MBZH (Museo y Biblioteca de Zoología de la Habana), MP (Museo Poey, Universidad de la Habana), UMMZ (University of Michigan Museum of Zoology), USNM (United States National Museum). Without the assistance of Ing. Héctor Sagué D. of the Instituto de Biología, our collaboration would not have been possible, and to him we extend our thanks.

## Dromicus andreae melopyrrha, new subspecies

HOLOTYPE: IB 1080, an adult female, from Punta del Negrito, Cayo Cantiles, Archipiélago de los Canarreos, Habana Province, Cuba, April 30, 1966, Orlando H. Garrido.

PARATYPE: ASFS V11177, an adult male, same data as holotype.

DIAGNOSIS: A subspecies of *Dromicus andreae* characterized by very extensive light coloration (fig. 1) formed of isolated spots on individual scales and arranged in dorsolateral and ventrolateral zones on a black ground; prominent temporal stripes; and intermediate ventral scale counts (higher than or at the upper extreme of *nebulatus* and lower than *orientalis*).

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DESCRIPTION (data for paratype in parentheses where different from holotype): Snout-vent length 462 mm. (407 mm.), tail 245 mm. (232 mm.). Dorsal scales smooth, in 17-17-15 rows; ventrals 144 (142); subcaudals 103 (107). Head scalation of generalized colubrid type; preoculars 1/1; postoculars 3/3 (2/2); temporals 1+3/1+2 (1+3/1+3); supralabials 8/8, 4 and 5 bordering the orbit; infralabials 10/9. Dorsal ground color black with extensive light pattern formed principally of single spots on individual scales: (1) a pair of wide dorsolateral stripes formed of prominent spots on scale rows 4-7, those on rows 5 and 6 being the largest, and continuing onto tail as an absence of spots along the midline; (2) a lateral light zone continuous with light ventral coloration formed of large light spots principally on scale rows 1-3. Light scale edges form a pattern across the midline at intervals along the anterior part of the dorsum but become diffuse and irregular posteriorly. The total effect is one of a series of dark rhomboids in the middorsal zone on the anterior part of the body. The head is heavily marked with light edges to the scales; the temporal stripes, of which the dorsolateral light stripes are continuations, are especially prominent. The throat is immaculate. The venter is light but with dark posterior edges to the scutes which become more extensive posteriorly and on the subcaudals. Color in life, from the field notes of the junior author: The ground color is a shiny black on which the light markings stand out as a clear sky-blue. The ventral surface is a clear pale blue, almost whitish, except for the dark edges to the ventrals and some haziness due to stippling of dark pigment on the posterior half.

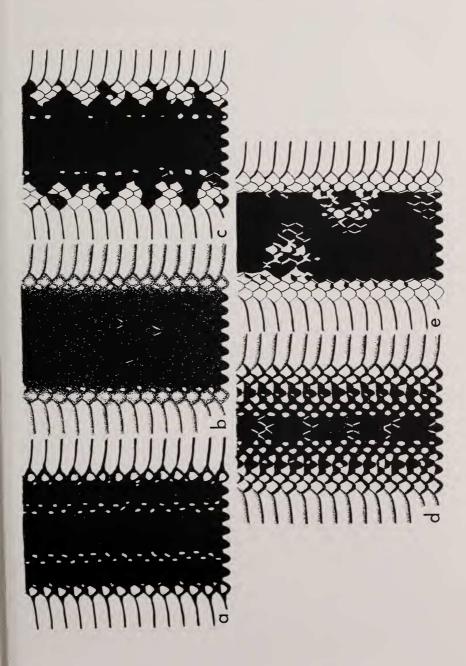
RANGE: Presently known only from Cayo Cantiles, Archipiélago de los Canarreos (fig. 2).

comparisons: In ventral counts (fig. 3) the two *D. a. melopyrrha* are at or beyond the upper extreme for their nearest geographical relative (*D. a. nebulatus* Barbour), although additional specimens will probably show considerable overlap. Otherwise the specimens of *melopyrrha* differ most from *D. a. orientalis* Barbour, although the male has somewhat fewer ventrals than the single male *D. a. peninsulae* Schwartz and Thomas. Patterns are compared in Table 1. It should be noted that *melopyrrha* is the lightest in coloration of any of the subspecies of *D. andreae*. *D. a. andreae* is a nearly uniformly black snake; *peninsulae* is very dark, *nebulatus* only somewhat less so. Next to *melopyrrha*, *orientalis* is the lightest subspecies.

REMARKS: The name melopyrrha is derived from the Cuban bull-finch or "negrito," Melopyrrha nigra (Linnaeus).

The type and paratype were collected together in a hole in *diente de* perro limestone along a path in the wooded part of Cayo Cantiles.

Fig. 1. Patterns of the subspecies of *Dromicus andreae*: a. *D. a. peninsulae* (AMNH 83235, holotype); b. *D. a. andreae* (AMNH 83315); c. *D. a. orientalis* (MCZ 25156); d. *D. a. melopyrrha* (IB 1080, holotype); e. *D. a. nebulatus* (CM 286). All patterns at midbody except e., which is from the anterior third of the body.



It is possible that they had been copulating, as one of them exuded some blood from its cloaca.

Dromicus a. peninsulae: Two more specimens of this subspecies were collected by the junior author on the Península de Guanahacabibes. A ventral count is available for one of the specimens and is identical to that of the type (149), the only previously known specimen. The additional specimens confirm peninsulae as a black snake with dorsolateral rows of light (sky-blue) spots on two scale rows. Parietal stripes are present.

#### SPECIMENS EXAMINED

### Dromicus andreae nebulatus:

"Cuba," MCZ 1979. Isla de Pinos: AMNH 78606, Sierra de las Casas, just W of Nueva Gerona; AMNH 82853, 82856-82858, east base, Sierra de las Casas; AMNH 82854, 1 mi. S Nueva Gerona; USNM 28036, Nueva Gerona; AMNH 78607, Puerto Francés; AMNH 82855, Jacksonville; USNM 120824, CM 285-287, 303-308 (paratypes), Los Indios; MCZ 11092 (type), Sierra de Caballos; MCZ 11154-11157, 13286-13287 (paratypes), CM 1535 (paratype), "Isle of Pines."

## Dromicus andreae peninsulae:

Cuba, Pinar del Río Prov.: AMNH 83235 (type), 3 km. W of Bartoli sawmill village, 10 km. SW of Cayuco; IB 1029, La Tumba, 4 km. E of lighthouse at Cabo de San Antonio; IB 1030, 8 km. E of lighthouse at Cabo de San Antonio.

#### Dromicus andreae andreae:

Cuba, Pinar del Río Prov.: AMNH 83323, 10 km. S San Juan y Martínez; AMNH 83317, 1 km. N of La Coloma; AMNH 83318, Viñales; AMNH 82827-82852, 83324-83334, San Vicente; AMNH 83320-83322, 1 km. S of San Vicente; Habana Prov.: MBZH 53, [Playa] Baracoa; MBZH 83, Somorrostro (not mapped); AMNH 70591, Luyano; AMNH 46680-46683, 46548, El Cotorro; USNM 56082, Santiago de las Vegas; Las Villas Prov.: AMNH 82826, mouth of Río de Sierra Morena, nr. Playa Ganuza; AMNH 83236, 6 mi. S of Manicaragua; AMNH 46666, El Purio (not mapped); AMNH 7388, Caracas Sugar Mill; AMNH 7389-7390, Baños de Ciego Montero; USNM 56084, AMNH 96552, Trinidad; USNM 137089-137092, Cave of the Boas, nr. Trinidad; USNM 56083, Santa Clara; USNM 36805, Isabella (not mapped); AMNH 96551, Soledad; INHS 70, Cienfuegos.

## Dromicus andreae andreae X orientalis:

Camagüey Prov.: AMNH 83237, 9.6 mi. SE of San José del Lago (Las Villas); AMNH 83238-83240, Embarcadero de Morón; AMNH 83241, 15 mi. E of Morón; AMNH 83242, 14 mi. E of Morón, Loma de Cunagua; MCZ 13285, San Juan le los Perros; AMNH 83249-83250, AMNH 96553, 21 km. W of Camagüey;

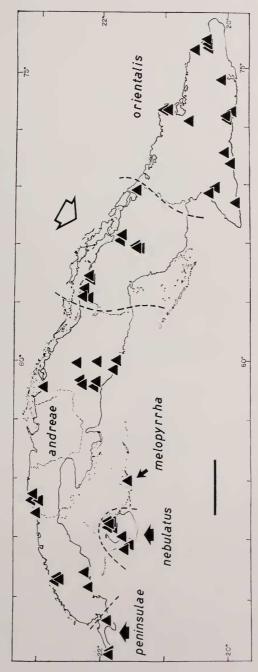


Fig. 2. Map of Cuba and the Isla de Pinos showing localities and ranges for the subspecies of *D. andreae*. The large arrow indicates the zone of integradation between *D. a. andreae and D. a. orientalis*. Scale line equal to 100 km.

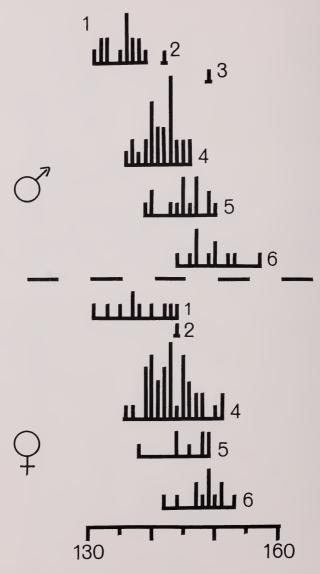


Fig. 3. Chart showing ventral counts for the subspecies of *D. andreae*: 1. *D. a. nebulatus*; 2. *D. a. melopyrrha*; 3. *D. a. peninsulae*; 4. *D. a. andreae*; 5. *D. a. andreae* x orientalis; 6. *D. a. orientalis*. The smallest vertical unit represents one individual.

AMNH 83373, 20 km. W of Camagüey; AMNH 83374, 20 km. W, 4 km. S of Camagüey; AMNH 83228, Sierra de Cubitas; AMNH 83243-83248, 5.5 mi. NE of Banao; AMNH 83375, 83380, Paso de la Trinchera, 6.5 mi. NW of Banao; AMNH 83376, 10 mi. S of Santa Lucía; UMMZ 72406, Tana (not mapped).

## Dromicus andreae orientalis:

Oriente Prov.: MBZH 54, Ensenada de Mora; MP (A, B), Cuabitas; MBZH 57, Vista Alegre, Santiago de Cuba; USNM 26764, Santiago de Cuba; USNM 120825, Banes; MCZ 25156, Río Banes; USNM 29584, 29754, 29780, 29784, Guamá; AMNH 62053, Marcané; AMNH 83807, Taco Bay; AMNH 83377, west slope, El Yunque de Baracoa; AMNH 83378, USNM 29850, Baracoa; AMNH 83379, 15 km. W of Baracoa; USNM 138520, 2 mi. S of Yara; USNM 56081, Manzanillo; INHS 71-72, Loma del Gato; MCZ 11723-11725 (paratypes), 11726 (holotype), Guantánamo; AMNH 96554, Playa Juraguá.

### SUMMARY

A new subspecies of *Dromicus andreae* Bibrón is described from specimens collected on Cayo Cantiles, Archipiélago de los Canarreos, east of the Isle of Pines, Cuba. *Dromicus andreae* melopyrrha, new subspecies, is characterized by a coloration much lighter than that of the other subspecies of *Dromicus andreae*. Two additional examples of *D. a. peninsulae* Schwartz and Thomas, a subspecies previously known only from the type specimen, are discussed.

Se describe una nueva subespecie de *Dromicus andreae* Bibrón en el Cayo Cantiles del Archipiélago de los Canarreos, al este de la Isla de Pinos, Cuba. Esta nueva forma se caracteriza por tener una coloración más clara que la de las otras subespecies de *Dromicus andreae*. Dos ejemplares más de *D. a. peninsulae* Schwartz y Thomas son registrados (esta subespecie era anteriormente conocida por un solo ejemplar).

### REFERENCES CITED

SCHWARTZ, ALBERT, AND RICHARD THOMAS

1960. Four new snakes (*Tropidophis*, *Dromicus*, *Alsophis*) from the Isla de Pinos and Cuba. Herpetologica, 16(2): 73-90.

COMPARISON OF COLOR PATTERNS IN THE FIVE RACES OF DROMICUS ANDREAE

	Temporal Stripes	Anterior Pattern	Midbody Pattern	Tail Pattern
тегорутћа	Prominent, associated with much light motling on head; continuous with dorsolateral body stripes	Wide dorsolateral stripes, wide ventro-lateral light areas; middorsal zone with dark rhombs outlined by light scales and scale edges	Like anterior pattern but middorsal zone without rhombs, only scattering of light scale edges	Bold light spots on all rows, narrow middor-sal dark zone present
nebulatus	Prominent, extend onto neck	Few large staggered light triangles, narrow ventrolateral light areas	Narrow dorsolateral stripes, narrow lateral light area	Narrow dorsolateral stripes of elongate dashes on single scales; middorsal zone two scales wide anteriorly
peninsulae	Faint to moderate	Narrow light dorsolateral stripes of small spots on two rows; ventrolateral light area narrow, diffuse	Like anterior pattern	Dorsolateral stripes composed of rounded dots
andreae	Prominent to faint	Uniform black	Uniform black, dorso- lateral stripes faintly indicated in few spec- imens	Uniform black
orientalis	Moderate to faint	Many small slightly staggered or opposite light triangles, sometimes connected across midline; ventrolateral light areas grossly serrate	Narrow or broad light dorsolateral stripes; light scale edgings in middorsal zone diffuse or forming crossbands	Dorsolateral stripes of spots or dashes; middorsal zone two scales wide anteriorly